SMPTE® Digital Library
Setting the standard for motion imaging technology

IEEE has partnered with the Society of Motion Picture and Television Engineers® (SMPTE®) to bring a century of groundbreaking standards and peer-reviewed articles in the field of motion imaging to the IEEE *Xplore* digital library.

The SMPTE Digital Library:

- **Provides key research** on creation and delivery of quality images from camera to display
- **Opens business opportunities** by using industry-accepted standardized methods
- **Describes state-of-the-art workflows** for content creation and distribution
- **Encourages system interoperability** of products within the marketplace
- **Accelerates innovation** by understanding the media technology landscape
- **Increases productivity** by providing access to previous research, avoiding redundant efforts

Stay ahead of the curve with the latest publications on applied media technologies by subscribing to the SMPTE Digital Library.

SMPTE Content Areas

The collection of titles focuses on leading science and technology areas such as:

- Audio
- Broadband
- Compression
- Control Systems
- Digital Cinema
- Display
- File and Image Formats
- Film
- Networks
- Projection
- Recording
- Test and Measurement
- Time and Sync
- Video

SMPTE Digital Library Quick Facts:

Focuses on innovative content for technologies within the communications, media, and entertainment industries.

Unlimited, full-text access to all SMPTE standards, journal articles, and conference papers.

Over 900 standards, including the iconic SMPTE Color Bars Television Test Patterns©, SMPTE Time Code©, and SMPTE Timed Text©.

The peer-reviewed *SMPTE Motion Imaging Journal*—more than 22,000 articles with a backfile to 1916.

SMPTE conference proceedings, including the Annual SMPTE Technical Conference and Exhibition—more than 1,600 papers with a backfile to 1969.

Complete package available exclusively in IEEE *Xplore.*

About SMPTE

For the past 100 years, the people of the Society of Motion Pictures and Television Engineers (SMPTE) have sorted out the details of many significant advances in entertainment technology, from the introduction of "talkies" and color television to HD and UHD (4K, 8K) TV.

For a custom quote, contact an IEEE Sales Representative.

Subscribe Today

See how IEEE *Xplore* can help drive research and innovation.
Visit **www.ieee.org/smpte-digital-library**

IEEE *Xplore* digital library www.ieee.org/ieeexplore Email: onlinesupport@ieee.org

SMPTE standards help members of the motion-imaging industry and related fields achieve interoperability, accelerate time to market, and pursue new revenue streams with confidence. Popular SMPTE standards include:

- **SMPTE Digital Cinema Packaging (DCP):** Industry recommended standards in captioning, object-based audio, stereoscopic 3D, and higher frame rates (HFR).

- **SMPTE Color Bars© Television Test Patterns:** The consistent reference point for more than four decades to ensure color is calibrated correctly on broadcast monitors, programs, and video cameras, and displayed beautifully for consumers.

- **SMPTE Time Code©:** Gives every frame of video its own unique identifying number, making digital editing possible, and enabling the association of other data to make audio and video even more meaningful, accurate, and repeatable.

- **Electro-Optical Transfer Function (EOTF) and High Dynamic Range (HDR):** Enables viewers to see a wider color range from the brightest whites to the darkest blacks, providing a substantial enhancement to HD or UHDTV pictures.

- **Serial Digital Interface (SDI and HD-SDI):** Well-established family of standards in the broadcasting industry for digital video interfaces used in broadcast-grade video.

- **Interoperable Master Format (IMF):** To solve the issue of the creation of multiple versions of a film, all individual assets are stored individually and represent the inventory required to produce any required version.

- **Material eXchange Format (MXF):** A very flexible file transfer format that permits interoperability of content among various applications used in the television production chain, and enhances operational efficiency and creative freedom.

- **SMPTE Transport of High Bit Rate Media Signals over IP Networks:** Creates a standardized framework for the transport of video over Internet Protocol (IP) networks that facilitates multipoint transmission, which is a critical enabler in monetizing content and advertising in new ways across multiple screens such as computers, smart phones, and tablets.

- **Compression Systems: SMPTE has standardized five VC standards:** VC-1 to VC-5 to provide well-reviewed documentation and enhanced interoperability.

- **Coding of Tactile Essence:** Standards regarding the capture, insertion and/or encoding into the broadcast, transmission, decoding, and conversion of the tactile or haptic feeling and impact of a live event.

SMPTE® standards help make high-quality motion-imaging content possible

SMPTE standards touch nearly every piece of motion imaging content consumed by billions of viewers around the world, ensuring that content is seen and heard in the highest possible quality on any display. Their standards are behind these types of technologies and events: the color bars television test pattern, live sportscasts in high definition, movies in 3D, downloaded/streamed content to a device, live sporting/music events, and closed captioning, among others.

Now available in the IEEE *Xplore* Digital Library

IEEE *Xplore* includes top-ranked journals and technology research that is cited in patents three times more than any other publisher. With more than four million full-text articles and papers, IEEE *Xplore* is your gateway to more than 30% of the world's current literature in electrical engineering, electronics, and computer science.

Award-winning SMPTE

Since its founding in 1916, the Society has earned an Oscar® and multiple Emmy® Awards for its work in advancing moving-imagery education and engineering across the communications, technology, media, and entertainment industries.

Phone: +1 800 701 IEEE (4333) (USA/Canada)
            +1 732 981 0060 (worldwide)
Email: onlinesupport@ieee.org

Subscribe Today

See how IEEE *Xplore* can help drive research and innovation.
Visit **www.ieee.org/smpte-digital-library**